Tunisia :

Economic and Social Challenges Beyond the Revolution

Banque africaine de développement
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Economic and Social Challenges Beyond the Revolution

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Abbreviations and Acronyms

AfDB	African Development Bank
ASEAN	Association of South East Asian Nations
BFPME	Banque de Financement des Petites et Moyennes Entreprises
BNDT	Banque Nationale de Développement Touristique
CEMAC	Economic and Monetary Community of Central Africa
CPI	Consumer Price Index
EPO	European Patent Office
EU	European Union
FDI	Foreign Direct Investment
GAFTA	Greater Arab Free Trade Agreement
GCR	Global Competitiveness Report
GDP	Gross Domestic Product
HDI	Human Development Index
ICA	Investment Climate Assessment
INS	Institut National des Statistiques
ITCEQ	Institut Tunisien de la Compétitivité et de l'Economie Quantitative
MDG	Millennium Development Goals
MEI	Mechanic and Electric Industry
MENA	Middle East and North Africa
MIC	Middle Income Country
NPL	Non-Performing Loan
OECD	Organisation for Economic Cooperation and Development
PEFA	Public Expenditure and Financial Accountability
PISA	Program for International Student Assessment
PPP	Purchasing Power Parity
R&D	Research and Development
SME	Small and Medium Enterprise
SOE	State Owned Enterprise
STB	Société Tunisienne de Banque

TDN	Tunisian Dinar
UNIDO	United Nations Industrial Development Organization
USD	US Dollar
USPTO	United States Patent and Trademark Office
WAEMU	West African Economic and Monetary Union

Table of Contents

List of Figures

List of Tables

List of Boxes

Foreword

Jacob Kolster

Following the historical events in January 2011, Tunisia became the epicenter of an unprecedented wave of political, social and economic transition in the region. As a result, the country is experiencing a period of profound transformation which has created new challenges and opportunities, particularly for the country's economy.

In addition to the growing economic ills and disparities that led Tunisians to take to the streets in protest of the former government, the economy has been further affected by the adverse immediate impacts of the revolution along with a protracted period of uncertainty and instability as Tunisians are adjusting and testing the boundaries of new-found liberties.

Though Tunisia faces a number of challenges in its current economic context, the transition also presents a unique opportunity to free the economy from the bottlenecks and red tape that previously impeded its development and to establish reforms that create a climate conducive to private initiative and business.

The government's commitment to implement such reforms will assure foreign investors as well as Tunisians of the opportunities that lay ahead. In the context of a transition marked by uncertainty, people are looking to the Government for a clear, transparent and credible communication of economic policies and strategies and how they translate into action and utilization of public resources. Clear and credible communication backed by action will help turn expectations into hope and optimism and ease social tensions.

It is our sincere hope that this report will contribute to the economic debate in Tunisia by assessing some of the challenges Tunisia is facing today and suggest possible reforms for the government to pursue.

Jacob Kolster
Director – Regional Department North Africa
for Egypt, Libya and Tunisia
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Executive Summary

Tunisia's revolution marked the onset of the Arab Spring, and since then, the country has embarked on a democratic transition. Though the issues analyzed in this paper - governance, inclusive growth, and structural economic challenges - were in many ways at the root of the revolution, they remain outstanding key challenges for Tunisia's future governments. While immediate actions are required to manage the political transition, as well as macroeconomic and social stability, these key challenges cannot be set aside.

Before the revolution, Tunisia's aggregate growth per capita and social indicators masked the rising resentment against injustice and worsening governance. The top-down character of the former regime allowed for the organized capture of rents by the ruling elite, a trend which increased during the last decade in tandem with the economic liberalization of the country. Despite gradual liberalization, the government kept control of the economy and state interference limited competition and market efficiency. The combination of a centralized, dominant public sector and the rent-seeking behavior of the ruling elite weighed heavily on domestic private sector development. To free the Tunisian economy from stifling governance problems, there is a need for greater transparency, the strengthening of accountability, the reconsideration of the public sector's weight in the economy, an improved business environment, increased competition, and a healthier banking system.

In addition, social inequality and regional disparities contributed to the grievances which gave rise to the revolution. Rising per capita revenue undervalued persistent social inequality and regional disparities, misrepresenting the situation in the hinterlands where the revolution began. The concentration of public investments, services, and economic activities in the coastal areas accentuated poverty (both headcount and gap) and unemployment in other regions, especially for the youth and women. Therefore, a reorientation of public resource allocation to the hinterlands, transparent and decentralized results-based public services, and positive discrimination for women will likely contribute to reestablishing social and regional equity. Furthermore, a skills mismatch and labor market inefficiency limited the opportunities for the educated youth to find a decent job. Adapting the education system to provide adequate skills-supply matching for the

private sector's needs and increasing labor market efficiency through more flexible rule combined with unemployment program will help reduce youth unemployment.

While Tunisia succeeded in the industrial transformation to produce more diversified and sophisticated goods, it is still struggling to move forward. Tunisian exports rely heavily on the European market, and innovation potential was previously stifled by a limited freedom of ideas and entrepreneurship. Though the country's export-oriented policy successfully developed the relatively competitive Tunisian manufacturing industry, it nevertheless remained confined to the export sector without important spillover effects on the rest of the economy. Restrictive regulation and protectionism of the domestic market, including the service sector, limited exposure to global competition, leaving their export and development capacities unrevealed. To reach the fast-growing stage of development, the Tunisian economy needs to diversify its industry and trade partners, foster a culture of entrepreneurship and private sector led innovation, and increase exposure to global competition, including in onshore sector and selected service sectors.

The revolution and the ongoing democratization process underway in Tunisia represent a unique open opportunity to free the country from the bottlenecks that previously impeded its development. While short-term policies should give strong signals of change by addressing governance problems and social demand, the country's growth pattern and structural policy should be reconsidered in order to promote inclusive growth and a successful economic shift to a higher level of development.

Introduction

The Tunisian uprising began as a spontaneous social protest against unemployment and social injustice in the hinterlands. In less than a month and against all predictions, street protests swept away a regime that had been in place for 23 years.

Since the ouster of the former government, Tunisia has been undergoing a challenging transition period with a negative growth estimate and a rising unemployment rate for 2011. In addition to the economic impact of the social unrests prior to the revolution, which is estimated to about 4% of GDP loss, several factors continue to worsen the country's economic situation. Tourism receipts were reduced by 37% during the first ten months of 2011, the Libyan crisis is estimated to have reduced Tunisian growth by 36%, while the European debt crisis is expected to impact Tunisian tourism and exports significantly in the coming years. The political transition has not yet been finalized given that the October 2011 election chose the representatives for the Constituent Assembly responsible for writing the new constitution. This implies that Tunisia will face an additional period of institutional and political uncertainty until a new system is put in place. There is no doubt that the immediate priority for the country will therefore be to ensure the political stability, macroeconomic stabilization, job creation, and growth stimulation including tourism and export promotion.

Nevertheless, the causes of the revolution should not be set aside. In the past, it was believed that Tunisia had a successful economic and social development record. Yet, despite the country's performance, the revolution demonstrated that key social and development challenges remained. Making Tunisia a successful example of revolutionary uprisings as harbingers of change requires more than organizing an election. Rather, it will require that the roots and triggers of the revolution be addressed.

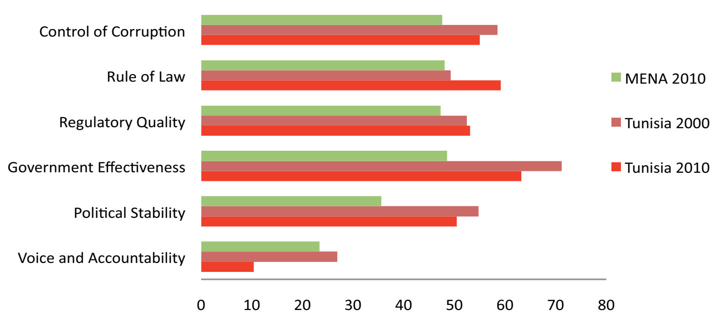
This note analyzes the background of the Tunisian revolution and the outstanding challenges ahead for policy-makers. The first section examines why the social contract under the former government became unsustainable and how increasing governance problems affected the country's business environment and economic performance. The second section reviews the sources of social resentment. Namely, aggregate social indicators, which despite their strong performance, were inaccurate representations of the increasing poverty and inequality rates in the hinterland, and rising youth unemployment. The last section analyses the main structural challenges of the Tunisian economy and business environment. Each of the sections provides policy recommendations.

1. Liberating the Tunisian economy from stifling governance inefficiencies

1.1 Good governance - an open agenda

Tunisia's political and economic environment was highly centralized, which was both a strength and a weakness of the government. It was in this context that governance problems worsened during the last decade, especially in the areas of corruption, government effectiveness, and accountability. In particular, "voice and accountability" in Tunisia in 2010 was much weaker than in 2000, and the MENA average for 2010[1] (Figure 1). The non-contestable character of the regime resulted in weak transparency and accountability. Public opinion was controlled and closely watched, and information screened and censored, including economic data. The political system relied on the centralized administration to influence or intimidate the population through several channels, such as the political party, police, justice, and tax administrations. As many dictatorships, the Tunisian regime was based on the authoritarian bargain: obligatory loyalty to the regime in exchange for political stability and the distribution of jobs and other benefits.

Figure 1: Governance Indicator - Tunisia in 2010 and 2000
Percentile Rank (0-100)

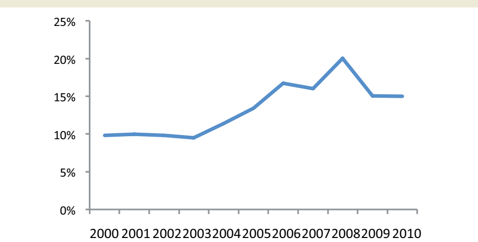


Source: Kaufmann D.A. Kraay and M. Mastruzzi (2010), The Worldwide Governance Indicators.

[1] D. Kaufmann, A. Kraay, and M. Mastruzzi (2010), "The worldwide governance indicators". A higher score is better.

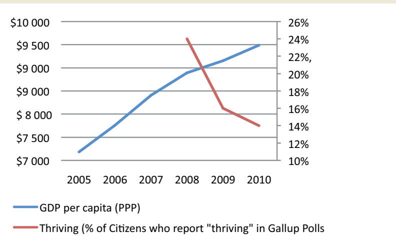
The system worked as long as the regime was able to provide enough jobs and money to meet people's expectations. Nevertheless, during its last years, the system reached its limit. While governance problems worsened, the unemployment rate increased, as did the amount of subsidies. Since 2000, the amount of subsidies has tripled, and its share in the government's expenditure increased from 10% during 2000-2004 to 15-20% during the last few years (Figure 2), despite the government's effort to progressively reduce the compensation budget (subsidy to basic commodities). The subsidy system became unsustainable due also to the international basic commodities' price increase. In addition, social transfers and subsidies served to compensate the minimum wage level, which was kept low in order to maintain the country's price competitiveness. As a result, social transfers were maintained at a very high level of 19% of the GDP during the last decade. Yet, the official GDP per capita statistics masked the actual welfare trends of the population[2]: citizens reported plummeting well-being levels at the same time as the official GDP per capita was steadily increasing (Figure 3). The feeling of unfairness increased among the population over time, especially amongst the educated youth, who could not be content with jobs provided by labor-intensive industries based on price competitiveness. The feeling of unfairness increased also with the lack of freedom and transparency and the increasing capture of rents by ruling elites, while the educated youth was unable to find a decent job.

Figure 2: Subsides (incl.transfers) as % of total expenditure



Source: Ministry of Finance.

Figure 3: GDP per Capita. Well-Being



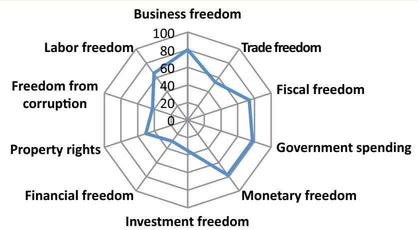
Source: Governance Arab World transition: Reflections, Empirics and Implications for the International Community, Daniel Kaufmann.

Increased top-down corruption and the rent-seeking behavior of the ruling elite corresponded with the period of economic liberalization, which contributed to the concentration of economic power to the elite through their interference in privatization and public procurement. Many of the

[2] D. Kaufmann (2011), "Governance and the Arab World transition: reflections, empirics and implications for the international community," Brookings institute.

key privatizations were conducted without transparency, sometimes for political reasons (to keep the strategic sectors under the government's control), but often to serve the rent-seeking behavior of the former president's entourage. It allowed the development of ill-acquired assets and firms, including in real estate, media, transport, banking, telecommunications, tourism, and distribution sectors. As a result, many of the key activities, such as car retail distribution (Peugeot, Ford, Jaguar, Hyundai, Kia, Porsche, etc.) for example, belonged to the former president's family. These were given bank loans at low rates as well as import licenses in a non-transparent way. "Le Moteur" (distribution of Mercedes and Fiat) and "Ennakl' (Volkswagen, Audi) were privatized and sold to the former president's sons in law. It is thus unsurprising that corruption is of great concern for Tunisians, with 86% of those surveyed considering it a serious socio-economic problem[3]. Moreover, the fact that the country's key businesses belonged to the former president's entourage or were influenced by them created a suspicious business environment in the private sector, including for foreign companies (Figure 4). Big projects including foreign investments were screened and strongly exposed to political interference. Political opinion and relationships with the political personages could influence the course of business.

Figure 4: Index of Economic Freedom 2011



Source: The Heritage Foundation and Wall street journal.

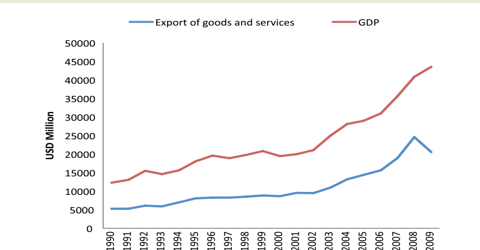
1.2 Rethinking the role of the state: Making room for the private sector

While Tunisia implemented structural and business environment reforms and gradually opened its economy, the government kept control of the economy. Liberalization reforms progressively reduced tariff and trade barriers[4], privatized about 160 state-owned enterprises (SOEs), simplified the tax structure, and reduced public and external debts during the last two decades. Its export-oriented policy and investment incentives (Law 72-38 on offshore regime, Law 93-120 on investment code) attracted the FDI, increased exports, and created growth and jobs (Figure 5). Tunisia entered into a free trade area with the EU for manufactured goods in 2008 and was considered to have a relatively open economy (Figure 6). Nevertheless, the Tunisian economy remained in large part centrally planned and controlled by the administration. Exchange

[3] Survey conducted by the Arab institute of the head of companies (IACE) in September 2011.
[4] Lastly, the number of tariff bands was reduced from 54 in 2003 to 14 in 2006, then progressively to 5 in 2010. The average tariff has been reduced from 31% in 2006 to 17.6% in 2010.

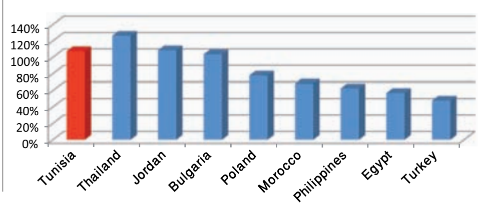
rates and capital accounts are still under the strict control of the Central Bank, even though exceptions are accorded to export-related activities. The public sector dominates all the strategic sectors in the economy (e.g., energy, transport, telecommunications, pharmacy, collection and trade of basic food, etc.) and basic commodities prices are controlled by the government (which represents one third of the CPI). The Nine largest firms (in turnover) of the country are SOEs. The former government's five-year plans and targets, especially the ones set by the president (under the presidential program) were to be respected. Hence, "inefficient government bureaucracy" appears as the most problematic factor in doing business, and the burden of government regulation is considered as relatively heavy[5], plummeting Tunisian competitiveness.

Figure 5: Export and GDP (current USD)



Source: World Development Indicators.

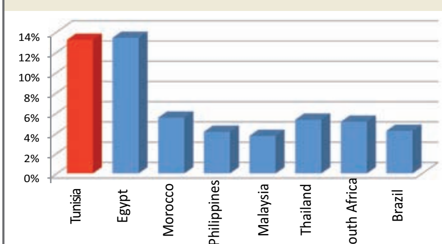
Figure 6: Degree of Openess of the Economy



Source: Trade as % of GDP, 2009.

The banking system also played a key role in supporting government policy through government-backed loans to state-owned enterprises, but was progressively affected by the asset predation of the former president's entourage. A number of Tunisian banks have suffered from weak corporate governance. Under the previous regime, their lending decisions and ownership structures were often subject to political interference. Moreover, board members often lacked independence and their appointment was in many cases influenced more by their political position than by their skills. Some banks belonged directly or indirectly to the former president's entourage. It is estimated that

Figure 7: Non Performing loans in Banking System 2009 (% of total Loan)



Source: International Monetary Fund, Global Financial Stability Report.

[5] Global Competitiveness Report 2011-2012.

about 7% of banking loans were granted to the companies controlled by the former president's extended family and entourage. Many of these loans might not be recovered until the assets are legally settled. In addition, the economic impacts of the revolution will further deteriorate the banking sector's performance. The Tunisian banking system was characterized by a relatively poor performance, with high levels of NPL (13% at the end of 2010) (Figure 7), a low provisioning rate (58% at the end of 2010), and low capital adequacy rate (12.4%). Three state-owned banks control about one third of the Tunisian banking system (38.7% of total assets, 43.5% of loans and 36.5% of total deposits at the end of 2009), which lowers the average performance. In the past, public banks were created to support the development of specific sectors such as housing, agriculture, tourism, and industry. In 2001, these public development banks were transformed into universal banks through mergers, following the law that established the universal banking system. Nevertheless, they inherited both the policy of providing funds to specific sectors and the high level of NPLs. This is especially true for the STB which was merged with the BNDT (National Bank of Tourism Development) and which is still heavily affected by the NPLs in the tourism sector. The significant share and roles played by the state-owned banks in the current economy shows that the Tunisian banking system is still subject to the government's interference, which weighs heavily on their performance. Tunisia is considered to have limited financial freedom and a small, fragmented, and relatively weak banking system, which penalizes access to financing for the domestic private sector by raising the cost of credit. As a result, while SMEs represent more than 80% of companies, they obtain only 15% of bank loans. On the other hand, banks' lending in real estate represented 21% of the total lending in 2009, mainly for the residential real estate. Loans to SMEs are often granted against collateral, without evaluation of business potentials. The limited capacities of the banks in evaluating SMEs' business risks and potentials constrain access to financing for the SMEs and the development of innovation in Tunisian industry. The support to SMEs and Microfinance were mainly managed through public banks, such as BFPME (Bank for SMEs financing) and Tunisian Solidarity Bank (in charge of Microcredit financing). The microcredit scheme was especially subject to strong political interference, which hampered its development.

The combination of the public sector controlling key economic activities and the fact that many of the big firms were owned by the elite increased the unjustified protectionism of key sectors and unfair competition in the domestic market, limiting private sector development. Despite the impressive improvement of Tunisia's ranking in the World Bank Group's Doing Business from 80th in 2006 (out of 175 countries) to 40th in 2011 (out of 183 countries), there have been limited impacts in promoting the domestic private sector. In recent years Tunisia has undertaken consistent reforms to improve its business environment through administrative and fiscal simplification, the establishment and strengthening of a competition council, facilitation and incentives for enterprise creation, and information access to business opportunities (online commercial registry). Despite sustained reforms, successive incentives, and tax mechanisms put in place to support private investment during these years, Tunisia's private investment remained relatively limited, with its share still under 60% of total investment and less than 15% of GDP. Especially in the onshore sector, it is largely reported that there is a significant gap between rules and practices, leaving discretionary power to the administrations. The import survey on products under surveillance which served de facto as an authorization or a regulation of imports by the Ministry of trade, or the non-transparent allocation of car import quota (which was supposed to be abolished after the free trade agreement with the EU) to the car retailers (most of them belonging to the former president's family) are some of the illustrative examples of the abuse of such power. Unfair competition is reported by 46% of surveyed Tunisian firms[6] and anti-competitive behaviors by 40% of surveyed firms[6]. While the business environment is relatively free and competitive for offshore sector[7] and to develop export-oriented industries, the domestic private sector lags behind heavy regulation, public sector controls, and governance problems. Majority ownership of Tunisian companies by foreign investors is not allowed without government approval, and domestic trading is allowed only by Tunisians (nationality and majority of capital). The recruitment of foreign labor is strongly restricted, while foreign currency regulation limits the exposure of the domestic private sector to the global market. It is worth noting that a very limited portion of offshore companies exploited the possibility of selling part of their production in the domestic market. Selling in the domestic market exposed them to local regulations and administrations, including to governance problems, contrary to offshore business, which were relatively unthreatened. As long as the firms stayed out of the domestic market, they could operate in arelatively transparent business environment.

1.3 Policy recommendations

Short- medium term policy recommendations:

- **Improve transparency:** The role that the Internet (Facebook, blogs) played during the revolution is striking evidence of the power that information can exercise. In the same way, democratization will empower the citizen's rights and increase demand for greater transparency and accountability

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[6] Institut Tunisien de la Compétitivité et de l'Economie Quantitative (ITCEQ), (2010) "Rapport annuel sur la compétitivité 2010"
[7] An "offshore" regime was created in 1972. Under this regime, exporting companies were given generous fiscal and financial incentives to attract FDI and boost exports.

from the administration. The interim government initiated a reform that establishes the right for citizens to access public information and data (Decree-laws N°41 of May 26, 2011 and June 14, 2011). Transparency in public information and data is critical to restoring confidence and public trust in the system. With respect to this new policy, the interim authorities proceeded to publish several documents (the entire annual reports of the Court of Accounts, budget execution reports, PEFA reports, etc.) that were never published during the prior regime. While the first disclosed documents were mainly related to a limited number of public finance documents, a more proactive and systematic diffusion of information will greatly improve the business environment by giving a strong signal of change in the administration's culture and behavior. These can include public procurement processes and bidding results, details on the privatization process, economic and social data, detailed budget planning and execution, the government's intervention on trade and the domestic market (authorizations, customs, tax, subsidies, etc), as well as judicial records. In the medium - long term, all important government and administrative decisions should be made public so that any citizen or company can be aware of the decisions made and their justification.

- **Strengthen voice and accountability:** The centralized nature of the former regime exposed many public services to political interference, including the police, the judicial system, the tax system and even social administrations. As a first step, putting in place transparent results and a performance-based management system will help reorganize public services in a ccordance to their mandates and objectives, and increase the efficient use of public resources. Moreover, the accountability of the administration can only be strengthened if it is in a contestable environment. There is a strong need to establish a system of checks and balances between the executive, legislative and judicial powers. Thus, in addition to the democratization, the judicial reform should be implemented in order to put in place an independent, transparent and accessible judicial system for citizen and private sector, which can counterbalance executive or legislative power and avoid any potential abuse of power.

- **Strengthen banking system:** In May 2011, the Central Bank issued a circular for good governance practices in banks, as a first step to improving the banking sector's governance. A transparent and accountable management system in the banking system will help build better governance in the banking sector, and contribute to cleaning up the bank's portfolio by classifying bad loans without political considerations. Moreover, the relationship between the state and banks should be further clarified, with greater autonomy for the Central Bank and the encouragement of performance-based management in state-owned banks. Similarly, public banks' participation in the SOEs' capital and their lending policy to the SOEs should be reconsidered (including by solving existing NPLs of SOEs which burden public banks' performance). In addition, there is a strong need to reorient the role of banks in the economy by improving their ability to evaluate SMEs and by developing microfinance schemes. Similarly, the support of public banks to SMEs and Microfinance should be organized without the government's interference when it comes to granting loans, and promoting grassroots approach, especially for the BFPME and the Tunisian Solidarity Bank. In the medium term, a wide merger of banks including strategic partnerships with foreign banks could better structure and strengthen the Tunisian banking system.

Long term & structural policy recommendations:

- **Reduce the weight of the public sector in the economy:** The dominant role of the public sector in the key economic areas has worsened governance issues and limited private sector development. There is a need to revise the governance framework of public enterprises, including in the banking sector. The role of the SOEs and state participation in enterprises should be reconsidered in order to improve SOEs' performance and leave more space and opportunities for the private sector. Appointment of board members based on their skills, putting in place a transparent performance-based management of SOEs, and dissemination of financial statements are part of the necessary first steps. Eventually, further privatization, especially in the sectors in which important externality to the rest of the economy could be expected, will stimulate private sector development.

- **Improve business environment and increase competition:** Tunisia has a performing institutional framework compared to the international standards. Yet, practices were not meeting standards promoted by the law, especially with regard to the onshore sector. To establish public trust, it is critical to reduce the gap between rules and practices. Clear rules applied to all entities without exception, transparent sanctions and penalties, and transparency in decision making, including in bidding processes or in authorization granting, could reduce uncertainty and thus risk aversion. At the same time, the competition's rules and framework should be strengthened through, for example, greater autonomy and a stronger mandate for the Competition Council. Over the long term, the judicial system should resolve legal issues with the administration and commercial disputes between entities in order to solidify the rule of law in business. In addition, the simplification of complex bureaucratic procedures could help build a more transparent, understandable and efficient system.

2. Inclusive growth : a remedy to social inequality and regional disparities

2.1 Successful growth and poverty reduction, but not pro-poor growth

Box 1. Tunisia's demographic trend

Tunisia's demography is characterized by a high concentration in the middle part of the population pyramid, resulting in increased pressure on the labor market. The Tunisian population was estimated to be at 10.5 million in 2010, which is twice as much as it was at the beginning of the 1970s. Nevertheless, the country's demographic growth slowed during the 1990s as the fertility rate gradually declined. The number of children per woman has decreased from 6 during the 1960s to 3.4 in 1994, and to 2.05 in 2009, the lowest rate in the Arab world. The population is therefore growing at a slow pace of 1.2%. The population is concentrated in the middle part of the demographic pyramid, with ages 15-29 representing 29% of the total population and ages 30-59 representing 37% in 2009 (INS data). The parts of the population that are growing incidentally correspond to the ages during which individuals are active in the labor market. Specifically, the active population in Tunisia increased by 25% since 2000. As a result, the youth bulge has resulted in increased pressure on the labor market. At the same time, economic growth and a proactive social policy contributed to a quick increase in GDP per capita and an improvement in social indicators. Thanks to a free and rigorous obligatory primary education policy, the population entering the labor market is largely educated, with a primary enrollment rate of 98% both for boys and girls (age 6-11) in 2009-2010, and a secondary enrolment rate of 74% for boys and 81% of girls (12-18 years old). In the higher education system, the number of students doubled and the number of graduates more than tripled in 10 years. As many MICs, Tunisian development also resulted in urbanization. The urban population represents 66% of the total population in 2009, with a strong concentration in the Tunis district (almost 10%).

Tunisia was considered to have achieved successful social development, which accompanied economic development. Sustained economic growth was combined with a proactive social development policy, which allowed improvement in the country's social indicators. Tunisia is therefore expected to reach most of the Millennium development goals (MDGs). With a human development index (HDI) of 0.698 in 2011, Tunisia ranks 94th out of 187 countries in the group of "high human development," placing Tunisia above the continent's and the Arab states' averages. However, with inequality-adjusted HDI, Tunisia loses seven rankings, with a score of 0.523. The improvement of aggregate social indicators was hiding growing inequality in income distribution.

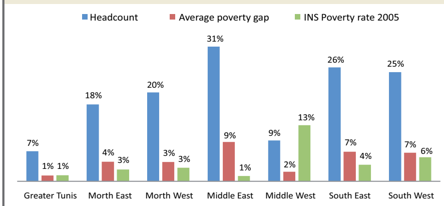
The official poverty rate (from the INS), which was brought down from 6.7% in 1990 to 3.8% in 2005, has been said to underestimate the poverty incidence in the country. According to the INS, the official poverty rate is based on the extreme poverty threshold of TDN 365 per year[8] . However, at a "higher threshold" (which takes into account additional basic household expenses) the poverty rate is estimated at 11.5%, and reaches even 29.4% in the Middle West region. For example, Morocco and Egypt use the latter threshold, and have 13% and 18% of their populations in poverty, respectively. The World Bank Global Poverty Project found an incidence of poverty of 7% for 2005. In May 2011, the Ministry of Social Affairs published its own national poverty rate of 24.7%, based on data from needy families and social program beneficiaries. While this triggered a public debate on data transparency, it did not follow a sound methodology and was mired in its own doubts regarding the criteria used to enlist "needy" families.

Regardless of the poverty level, Tunisia still succeeded in reducing poverty, but inequality remains a challenge. Economic growth has reduced poverty significantly, but at the same time, an increase in the Gini coefficient was observed especially during the 2000s, from 39.3 in 2000 to 42.1 in 2005. In 2000, using per capita household consumption expenditures, it is estimated that about 10% of the population lived with less than USD 2 (PPP) a day, and 18% live with less than USD 3[9]. Nevertheless, there is still significant inequality: The bottom half of Tunisia's population enjoys about 25% of total consumption, and the bottom 20% enjoys 8% of total consumption. Inequality can be also observed between regions: Greater Tunis has the least poverty, while the regions most affected by poverty are in the hinterlands: Middle West, South West, and South

[8] Based on estimation of cost for basic food needs (2200 calories per day) and minimum cost necessary to survive.
[9] J.Y. Duclos and A. Verdier-Chouchane (2011), "Growth, poverty and inequality in African Middle income countries", African Development Bank.

East. A similar trend can be observed with INS poverty data. The poverty rate (headcount with USD 3) has been reduced from 23% to 18% between 1990 and 2000, and this general trend has occurred in all regions, except in the South East. The North West benefited the most from the poverty reduction, from 38% in 1990 to 20% in 2000 (Figure 8). A similar trend can be observed for the intensity of poverty: the regions that have the highest poverty average gaps are the same as the ones in which the poverty headcount is also high - the Middle West, South West, and South East. In all regions the average poverty gap decreased, from 6.6% to 4.7% at national level, except again in the South East, while the North West region recorded the largest decrease, from 12% in 1990 to 4% in 2000. It is worth noting that the North West region, which was the poorest region in 1990, became the third-richest one in 2000. Nevertheless, another analysis[10] shows that in some governorates poverty increased significantly, while at the national or even regional level poverty was decreasing. This is the case for Kasserine, where both the absolute and relative poverty rates increased, from 19.3% to 30.7% and from 30.3% to 49.3% respectively between 1990 and 2000. Similarly, the relative poverty rate increased from 39.8% to 45.7% during the same period in Sidi Bouzid. The same analysis demonstrated that growth in Tunisia was not pro-poor, resulting in increased inequality and social exclusion. The increasing resentment of social exclusion largely explains why the social unrest prior to the revolution started in these governorates.

Figure 8: Poverty Across Regions



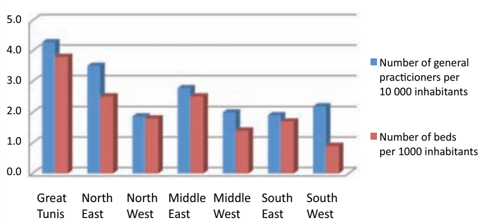
Source : 2000, using per capita household consumption expenditures, expressed in 2000 USD PPP, with a poverty line of USD 3, except for INS poverty rate 2005.

Regional disparities are accentuated by the concentration of public services, investment, and economic activities in the coastal region, with coastal areas receiving 65% of public investment. As a result, the hinterlands are less served in terms of public service delivery. Jendouba, for example, is the least served governorate in basic healthcare, with 1.4 general practicioners (public health) per 10 000 inhabitants, and less than 1.7 for Sidi Bouzid, Médenine, and Gafsa, against the national average of 2.7, and 4.3 for Greater Tunis (Figure 9). A similar result can be observed with the number of hospital beds. In the same way, the illiteracy rate reaches 30% in rural areas compared to 15% in urban areas and 23% nationally[11]. The excessive centralization of the adminisrtation contributed to the neglect of public services in the hinterlands, including basic services. Similarly, regional disparities

[10] S. Bibi (2011), “Poverty and inequality in Tunisia, Morocco and Mauritania”, African Development Bank.
[11] INS data, from 2004 census.

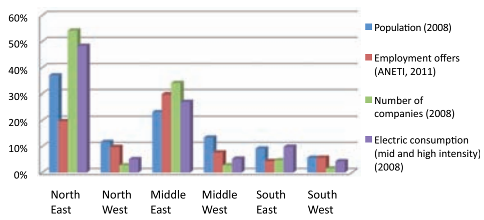
are caused by the concentration of economic activities in the North East and the Middle East regions, with the coastal region accounting for 75% of non-agricultural jobs. The Tunis governorate by itself absorbed 23% of total employment offers in 2010 against only 4% for the South East, even though it represents 9% of the country's population[12]. About half of the companies and of the electricity consumption (high and mid intensity) are concentrated in North East region, while less than 3% of companies and less than 5% of electric consumption are in western regions[13] (Figure 10). The significant poverty reduction in the North-West region is in fact the result of the large public and private investments the region benefited during the 1990s.

Figure 9: Spatial Distribution of healthcare



Source: Ministry of Health, 2011.

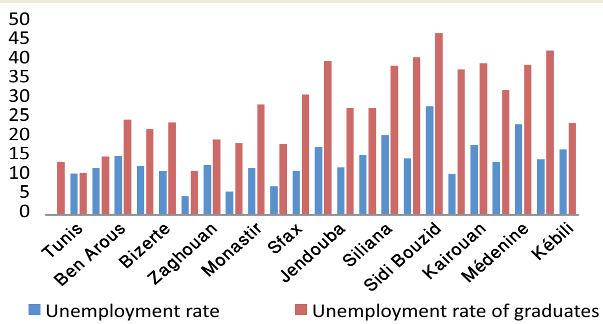
Figure 10: Share of Economic Activities Across Regions



Source: INS.

2.2 Increasing youth unemployment accentuated by a skills mismatch and an inefficient labor market

Figure 11: Unemployment rate across Governorates (%)

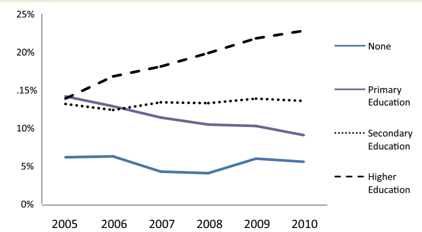


Source: Ministry of Regional Development, 2012 data.

[12] Data from Ministry of employment.
[13] H. Krifa-Schneider, F. Gsouma, H. Hammadou (2009), "Ouverture internationale, croissance et inégalités régionales : le cas de la Tunisie".

Regional disparities resulted in higher unemployment in the hinterlands, which are also the poorest regions (Figure 11). The unemployment rate is above 20% in Kasserine (21%), Gafsa (28%), and Tataouine (24%), compared to the national rate of 13% in 2010. However, Gafsa (47%), Sidi Bouzid (41%), Kébili (43%), and Jendouba (40%) have the highest unemployment rates for graduates, while the national average is 23%. In general, in Tunisia, the higher the level of education, the higher the unemployment rate (Figure 12). This explains why during recent decades, poverty reduction has also been more significant (from 32% to 25%) for non-educated households than for educated households (about 15%)[14]. Unemployment among youth is therefore higher, with almost 30% of 15 to 24 year olds unemployed, and 24% for 24 to 29 year olds, against less than 4% for 40 to 49 year olds. Tunisia's development, which was based on labor intensitve production, increased the demand for less-skilled workers.

Figure 12: Unemployment Rate and Education Level



Source: Ministry of Employment, 2011.

Table 1 – Youth Unemployment and Inactivity (in 2007)

	Unemployment rate			Unemployment rate	
	Women	Men	Total	Women	Men
Without qualification	18.72	20.62	20.08	63.35	9.34
Secondary education	30.54	28.22	29.04	30.80	3.07
Advanced technicians	46.21	33.96	39.99	8.13	1.87
Master of social sciences	42.37	40.32	41.84	6.71	2.86
Master of economics, management, and law	51.74	39.14	46.06	8.20	2.96
Master of exact sciences	44.56	35.88	39.82	4.69	0.72
Other master's degree	42.02	30.17	36.68	8.41	4.22
Engineering	35.18	20.63	24.16	9.87	1.55
Medicine and pharmacy	36.19	20.53	28.69	6.24	2.69
Post-graduate vocational and Ph.D	32.50	21.28	26.49	8.03	0.00
Total	28.68	23.64	25.38	50.54	7.42

Source: Calculation from INS data, "Analysis of youth graduate unemployment," Natsuko Obayashi, Audrey Verdier-Chouchane, Marco Stampini, AfDB, 2009.

[14] J.Y. Duclos and A. Verdier-Chouchane (2011), "Growth, poverty and inequality in African Middle income countries", African Development Bank.

Unemployment is much more severe for women. The unemployment rate is higher for women (19% in 2010) than for men (11%), and twice as high for graduate women (33%) as for graduate men (16%). But these figures still largely underestimate women's unemployment in Tunisa, as they are less present in the official larbor market. Sixty-three percent of young women without qualifications are declared inactive (comapred to 9% for men without qualifications), but only 18% of women without qualifications are declared unemployed (against 20% for men without qualifications) (Table 1). Similarly, while women are 67% more to be graduated from university (2008-2009), only 25% of women are in the labor market. Even among women between the ages of 20 and 29, less than 35% are in the labor market. This paradoxal trend suggests that there is a strong form of discrimination against women in the labor market. It is also worth noting that while they represent an increasing share of graduates, 16% of women aged 25-29 and 24% of women aged 30-34 are illiterate, against 6% and 8%, respectively, for men. As a result, even though Tunisia performs relatively better than other Arab countries, gender equity is considered to be far below the international standard (with Tunisia scoring 49 out of 100 in Gender equity index)[15], mostly because of women's limited participation in economic activity (score 33.5) and empowerment (score 18.6).

There is a significant skills mismatch between labor supply and demand. In the past, most graduate students were employed by the public sector, and it still absorbs about half of the graduates from social sciences, exact sciences, medicine, and pharmacy. The private sector absorbs only about one third of graduates from economics, management, law, and advanced technicians, the fields in which the unemployment rate is the highest: 46% of graduates from economics, management, and law, and about 40% of advanced technicians are unemployed (Table 1)[16] . In fact, the private sector employs more than half of young people without qualifications and secondary education, and almost 60% of graduates in engineering. The mismatch between the Tunisian economic structure which remained in a low qualified labor intensive stage and the massive production of highly educated labor supply explains in large part the limited employment elasticity to growth (estimated to be about 0.43-0.47). Nevertheless, it is worth noting that, while Tunisia is suffering from increasing graduates unemployment, an "inadequately educated workforce" appears as one of the most problematic factors in doing business (GCR 2011-2012). This partly explains the strong elasticity of substitution in employment between graduates and

[15] Gender equity index 2008 (social watch), high score being better.
[16] M. Stampini and A. Verdier-Chouchane (2011), "Labor Market Dynamics in Tunisia: the Issue of Youth Unemployment", Review of Middle-East Economics and Finance, Vol. 7, No 2.

non-graduates in industrial sectors, and particularly in the mechanics, electronics, food processing and textile sectors[17]. As a result, 62% of surveyed Tunisian companies complain about the difficulties of hiring qualified employees (2010), with higher constraints for SMEs and totally exporting companies[18]. This highlights an inadequate labor market supply, especially in the textile (32%) and health (34%) sectors. According to the same survey, the higher his or her grade, longer it takes for a new employee to become operational (Table 2). The quality of education is also considered to be responsible for the inadequate skills supply. The Tunisian education system is considered to be relatively weak compared to the OECD countries and comparable MICs[19]. The policy of free access to education for all has been implemented at the expense of educational quality.

Table 2 – Number of weeks for a new employee to become operational

	2005	2010
Executive manager	18	23
Engineer	19	23
Advanced technician	17	20
Qualified worker	13	16

Source : ITCEQ.

Restrictive labor market regulations limit turnover and increase precarious jobs. The Tunisian labor market is considered relatively restrictive and inefficient when compared to international standards. It ranks 108th out of 183 countries for “employing workers” in Doing Business 2012[20] and 106th out of 142 countries for “labor market efficiencies” in GCR[21]. Since the revisions of the labor code in 1994 and 1996, hiring rules have been relaxed by the introduction of more flexibility, through fixed-term and part-time contracts. Nevertheless, the legislation on firing is rigid and

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[17] Institut Tunisien de la Compétitivité et de l’Economie Quantitative (ITCEQ), DEFI université de Marseille (2011), “Modélisation sectorielle des industries manufacturières en Tunisie”, African Development Bank project.
[18] Institut Tunisien de la Compétitivité et de l’Economie Quantitative (ITCEQ), (2010) “Rapport annuel sur la compétitivité 2010”.
[19] OECD (2009), Program for International Student Assessment (PISA). The PISA is based on survey on knowledge and capacity among 15 years old children, conducted in OECD countries and some MICs (65 countries in 2009).
[20] There is no more « Employing workers » ranking in the latest Doing Business.
[21] The worst scores are for “Women in Labor force” (132nd), “Flexibility of wage determination” (119th), “Rigidity of employment index” (104th).

strongly controlled. While the possibility of dismissal for economic and technologic reasons has been introduced, its application remained limited because of the high transaction costs for companies due to uncertain administrative and legal procedures. In 2007, only 5.4% of dismissed workers had been laid off for economic or technological reasons. The indemnity amount is similar to other countries, but much higher than comparative countries or even to some OECD countries in cases in which the dismissal is considered unfair. The ex-ante uncertainty of the indemnity amount is therefore also part of the companies' constraints. The rigidity associated to terminating contracts translates to a limited turnover of labor. While greater labor mobility is generally associated with a structural transition of the economy toward more productive activities, the number of layoffs reached only 0.3% of total employment between 2002 and 2008, against 10% for OECD countries[22]. As a result, job seekers face a long duration of search for the first job or between jobs: one half of the workforce reports having searched between 10 and 24 months. Moreover, the restrictive firing rule increases paradoxally job insecurity. Informal work represents 54% of labor, and over 40% of graduates in their first job have a fixed-term contract. The sectors most exposed to the international market environment and to seasonal demand use non-permanent positions to adjust the supply. Only 45% of employment in the textile sector is permanent and only 35% in hotels (in 2010)[23]. Greater flexibility and a transparent firing rule could increase formal and permanent job creation, as the companies will integrate smaller cost of firing risk into their recruitment policies. There is a tradeoff to be made between the restrictive firing rule and job creation. On the other hand, the government could mitigate the effects of a more flexible firing rule by establishing a targeted unemployment benefit.

2.3 Policy recommendations

Short - medium term policy recommendations:

- **Reorient the public resources allocation in favor of the hinterlands and create jobs:** Increasing investments and public services, especially basic ones, in the underserved regions will help reduce the gap in social welfare. The interim government which followed the revolution revised public investment allocation in favor of the poor regions, transferred additional resources to local governments in the needy regions, and adopted an outreach basic social

[22] World Bank (2010), Tunisia - Employment development policy loan.
[23] Data from Ministry of vocational training and employment.

services package in underserved regions (Circular No. 14 of May 23, 2011). These reforms should be pursued and consolidated through a broader strategic approach. In particular, increasing resource allocation for local governments will result in improved public service delivery as local governments will be more aware of the needs of the population and be more accountable to them. Moreover, both public investments and services in the hinterlands will generate jobs in the areas where the unemployment rates are highest.

- **Make the public service agencies accountable to their beneficiaries:** In the short term, development and extension of the reform initiated under the interim government on citizen participation to assessing public service deliveries (such as the implementation of score cards) will increase the accountability of the administrations to the beneficiaries and will help the administration to respond to the population's needs. It is also urgent to increase the operating means of the local governments, as they are the ones which face the immediate needs and demand from the population and which also should be able to provide the adequate responses.

Long term & structural policy recommendations:

- **Promote sustainable inclusive growth:** While sustained growth and macroeconomic stability reduced absolute poverty, these conditions were insufficient to reduce relative poverty. At this stage of development, the country will need to revise the growth distribution pattern, and to promote pro-poor growth. Public policies such as investment and social services should help counterbalance the impact of regional disparities caused by the concentration of economic activities in the coastal areas and create greater opportunities in the poor regions. Some of the policies implemented under the former regime (such as incentives for investment in the underserved regions) are still relevant, but should be more business and private sector oriented. They should also be part of a clear strategic approach combined with infrastructure development and promotion of the private business networking which could increase business linkages between regions.

- **Implement transparent and decentralized results-based management in the administration:** The decentralization of the administration and the budget deconcentration will create greater autonomy for local governments and improve the efficiency of public services delivery once they are democratically elected and therefore more accountable to the local population's needs. At the same time, a transparent results-based management system should be implemented in the administration with a clear target to favor poor and underserved regions.

- **Improve the education system and better orient it to market needs**: More than 40% of graduates from social sciences, economics, management, and law are unemployed, while only 24% of engineering graduates are unemployed. University and vocational training curriculums should be adjusted to produce adequate labor skills for the private sector. A more proactive approach could be adopted by the universities and training schools in partnership with the private sector in order to allow students and teachers to be in direct contact with the private sector. In the long term, efforts should be oriented to improve the quality of the education system, starting from primary education.

- **Increase the efficiency of the labor market:** The Tunisian government had put in place several employment support mechanisms, which were estimated to be 0.7% of GDP and yet have never been assessed. An objective evaluation and the rationalization of these existing mechanisms for a better oriented employment policy will help increase their efficiency. At the same time, transparent and objective procedures and indemnity system should be set up for dismissals for economic and technological reasons, which affect enterprises' competitiveness and workers' eligibility for unemployment benefit. In addition, clarifying the status of private recruitment agencies by giving them a broader mandate as an intermediate agency[24] and increasing their number could allow better labor market efficiency and reduce job insecurity for workers employed by these agencies.

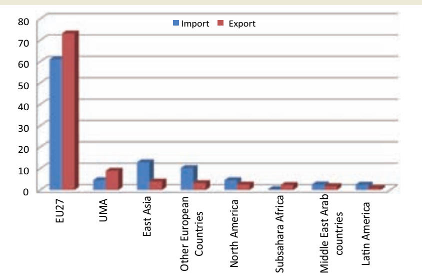
- **Reduce gender inequality in the labor market:** While Tunisia has reached equity in education, its impact is offset by an unspoken social discrimination against women in the labor market. As have many developed countries, Tunisia, which enjoys a high availability of educated and talented women, could introduce positive discrimination in order to promote women's participation in the labor force. The employment policy could also focus on fostering women's employment.

[24] Since 2000, private recruitment agencies have become popular, but their number remains limited (only three in the market), and their status constrains them to focus only on the temporary work force through their own recruitment. Officially, the only authorized intermediate labor supply agency is the public one (ANETI).

3. Structural Challenges: Moving up the Value Chain

3.1 The Successful Structural shift of the Manufacturing Sector, Halfway to an Innovation Driven Economy

Figure 13: Trade Partners (as % of total Export and Import)



Source: CEPEX, 2010.

Tunisian exports rely heavily on the European market, which absorbed 73% of the country's exports in goods in 2010 (Figure 13). The average tariff applied on goods from most favored nations stood at 22% in 2010, despite recent tariff reductions. Authorities are multiplying efforts for trade promotion with Arab and African countries. The Agadir agreement—which creates a free trade zone between Tunisia, Egypt, Jordan, and Morocco—entered into force in 2007. But there are still significant non-tariff barriers between these countries, which constrain the agreement's application. Tunisia also signed a free-trade agreement with 18 members of Arab league (GAFTA) and eight bilateral agreements, including with Turkey. The country is also undertaking trade negotiation with some key African regional entities, such as WAEMU(representing 40% of Tunisian exports to Sub-Saharan Africa) and CEMAC. There is a strong trade development potential with Sub-Saharan Africa. During 2009-2010, while exports to European countries were hit by the economic crisis, Tunisian exports to Sub-Saharan countries increased by 27.5%. Nevertheless, the impacts of these agreements remain marginal compared to the importance of the EU market on Tunisian exports. While the country has not succeeded in diversifying its trade partners, its share in the European market has decreased since the beginning of the 2000s. During 2002-2008, the Tunisian textile and apparel sector decreased its market share in the World (by -2.9% for apparel) and its comparative advantage (by -4.3% for apparel), due mainly to the end of the multifiber agreement. It is worth noting that China, which became the biggest textile exporter of the world, is less in competition with Tunisia than Morocco or Romania, which export products similar to Tunisia's (Table 3).

Table 3 – Similarity of Tunisian export and market share in textile, clothes, and leather (2008)

	Degree of similarity	Market share (%)
Tunisia	-	3.4
Morocco	80	2.8
Romania	63	3.7
Bulgaria	50	1.5
China	54	40.9

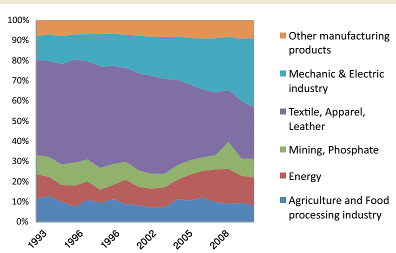
Source : ITCEQ, Comext data.

Table 4 – Tunisian industrial comparative advantage)

2002-2008	Global demand		Tunisian export		Comparative advantage		Growth in market share
	Growth	Share	Growth	Share	2008	Growth	
Hosiery	10.1%	1.3%	9.9%	10.3%	8.2	20.62	0.0%
Clothes	8.1%	1.3%	4.9%	21.3%	15.6	28.22	-2.9%
Car components	11,9%	2.3%	17.0%	1.6%	0.7	33.96	4.3%
Electric components	14.0%	0.9%	19.3%	1.3%	0.1	40.32	4.4%
Electric equipment	12.5%	3.5%	18.9%	11.8%	3.4	39.14	5.7%
Telecommunication components	12.8%	3.0%	47.3%	0.9%	0.3	35.88	28.9%
Electronics for public	12.6%	1.2%	400.2%	0.2%	0.2	30.17	363.0%
Electronic components	8.9%	3.2%	34.5%	0.5%	0.1	20.53	22.8%
Computer components	6.0%	4.4%	67.9%	0.5%	0.1	21.28	57.7%
Total goods	***14.5%***	***100.0%***	***16.1%***	***100%***	**-**	**-**	***1.4%***

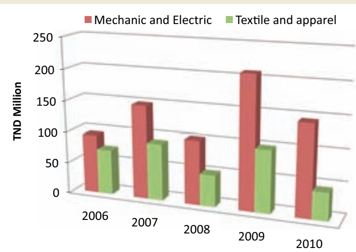
Source: ITCEQ , 2011.

Figure 14: Tunisian Export Composition



Source: INS data, 2011.

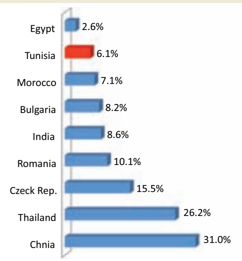
Figure 15: Foreign Direct Investments in Tunisian Manufactures



Source: FIPA, 2011.

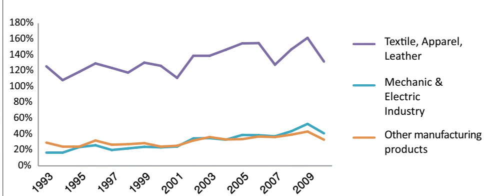
To face the global competition in the textile sector, Tunisia is shifting its specialization toward higher technology products since the end of the multifiber agreement. Manufacturing exports account for about 80% of the total export of goods. The share of textile-related products decreased from 47% of exports of goods in 1993 to 26% in 2010, while the share of mechanic and electric industry (MEI) products increased from 12% to 34% during the same period. It is worth noting that the share of other goods remained relatively stable (Figure 14). Similarly, MEI is the sector that absorbs the most manufacturing FDI (25% of total FDI to Tunisian industries in 2010). Its amount is also relatively increasing despite the economic crisis, which hit most of the sectors (Figure 15). Surprisingly, the textile sector, which is among the biggest manufacturing export sectors, absorbs only 8% of FDI in industries, and is stagnant. The Tunisian manufacturing industry that recorded the highest increase in market share and comparative advantage[25] is also the MEI. The comparative advantage of electric products grew by 3-4% and their market share by 4-6% from 2002-2008. IT related exports remain limited, as they represent only about 2% of Tunisian exports, but it is growing significantly, with a 330% increase in market share for the electronic products for the public and 57% for computer equipment (Table 4). On the contrary, the textile sector is losing its comparative advantage and market share because a strong substitutability with other countries is disfavoring the Tunisian position on the EU market for textile industries.

Figure 16: Share of high Technology Exports in Manufactured Exports



Source: 2009 data from ITCEQ.

Figure 17: Export / Import Coverage Ratio of Tunisian Manufacturing Industries



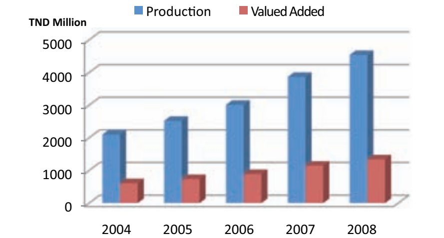
Source: INS data.

Despite the successful shift of the industrial structure toward higher technology products (from textile to MEI), it has not actually been accompanied by a specialization in high value added production. The share of high technology exports in Tunisian manufacturing product

[25] The revealed comparative advantage is the ratio between the weight of the product of the Tunisian export and the weight of the product in the World export. If the ratio is more than 1 the country is considered to have a comparative advantage in the product. RCA = (Xij/X.j)/(Xiw/X.w) (with Xij = Export of product i by country j ; X.j = Total export of the country j ; Xiw= Export of product i in the world ; X.w = Total world export).

exports was only 6.1% in 2009, below Morocco or Bulgaria, while Asian countries are well ahead (Figure 16). In fact, Tunisian MEI exports rely heavily on the import of components in the same sector, keeping Tunisia in a parts assembly industry. As a result, while the export/import coverage rate[26] is high for the textile sector (Tunisia exports more than it imports), MEI's coverage rate was only 41% in 2010 (Figure 17), even if it is characterized by an increasing trend (from 17% in 1993), which confirms that Tunisian MEI is moving up in the value chain. Nevertheless, despite the significant dynamism of the electric and electronic industry, the proportion of value added in the production remained stable at 29% between 2004 and 2008 (Figure 18). This same trend can be observed in the textile industry. Its value added remained stable at 32% of production during the same period, with the same specialization in labor intensive production - apparel and hosiery. These productions are labor intensive and less intensive in capital and technology than materials production industries, such as fabric and spinning productions. Thus, the Tunisian textile industry also depends heavily on its material imports, such as fabric (Table 5). It is specialized in "cut, make, trim" (assembly), which is still the first stage of the value chain in the product cycle (Box 2). Similarly, the Tunisian car components industry, which has significantly increased its export in recent years (by 20% between 2006-2008) is largely dominated by cable production (44% of automobile component exports in 2008)[27]. Exports of more sophisticated automobile components, such as electronic and electric components, are limited (28% and 22%, respectively) and stagnating. It is worth noting that export

Figure 18: Production and Value added of Electric and Electronic Industry



Source: APII data, 2010.

Table 5 – Tunisian textile industry

	Export (TND Million)	Import (TND Million)	Coverage ratio
Yarn	69	288	24%
Fabric	126	2098.2	6%
Hosiery	1168.4	174.8	668%
Apparel	3396.9	588.5	577%

Source : APII, 2008 data.

[26] The ratio of export to import. It shows the extent to which the imports are covered by the exports.
[27] Data from the Investment and Innovation Promotion Agency (APII), 2010.

destinations are often the same as countries from which inputs are imported. For automobile components, France (42% in 2008), Germany (26%), and Italy (14%) are the major export destinations, but they represent also the biggest imports of Tunisian automobile components, with a similar share for each country (France 33%, Germany 28%, Italy 15%). This cross trade between the same partners shows the magnitude of outsourcing production in the Tunisian industry. Some successful examples of the Mexican maquiladora industry[28] which is facing similar challenges show that an increasing role played by the local firms in the assembly industry can lead to capture higher value added in the production chain. In the other hand, East Asian experience demonstrated that the countries which have a critical size of domestic market are able to develop diversified industries and to move up in the value chain in some industries such as car production (China, Korea, Taiwan, Thailand), while their neighbors tend to valorize more specialized industries (Singapore, Malaysia, Philippines, Indonesia). Similarly, the experience in ASEAN countries also showed that capturing higher added value is moredifficult in mechanic and electronic industries because of the relatively stabilized scheme of division of labor, lead firms/countries guarding their hierarchy power in production chain.

Box 2. Moving up the value chain in and out of the product cycle

In East Asian countries, industrial upgrading has been undertaken through the vertical integration of production processes between countries. Lower income countries upgrade their industries by shifting from labor intensive, assembly type of production to more capital, then technology intensive products, which are usually inputs components and machinery production. The most upstream step is actually out of the product cycle, such as designing, branding, marketing, and distribution, which capture the biggest part of value added in the production chain. These activities are carried-out by leading firms, global retailers, and brand owners in the countries that lost their comparative advantage in production stages, as countries grow richer and wages rise.

The Tunisian economy is considered to have limited capabilities in innovation, a weak R&D institutional framework, and low R&D spending by the private sector (Figure 19)[29]. Under the

[28] Maquiadora is a Mexican assembly industry developed at the US border which enjoys the free trade in goods and capital. It largely remained an assembly industry, using inputs from the US and integrating very little with the Mexican economy.
[29] Tunisia's poorest score in Global competitiveness index 2011 is in "innovation and sophistication factors" (3.9 out of 7), and more specifically in innovation (3.6) and technological readiness (3.8). For the innovation, capacity for innovation (3.4), company spending on R&D (3.4) and University-Industry collaboration in R&D (3.7) are considered to be particularly weak.

former regime, the government was put under the contradictory objectives of developing a knowledge-based economy and the censorship and the strong control in place, while freedom of information and ideas is critical for research and innovation. Eastern European countries were able to attract investment and develop their industries not only because of their geographical proximity with Western Europe, but also thanks to their dynamic R&D activities. A survey conducted among Tunisia-based firms in 2009[30] found that, despite the authorities' efforts to promote R&D, the share of firms conducting R&D has remained stable since 2006 (about 38%), and was mostly limited to big firms. The weakness of the research and innovation capacities is illustrated by the small number of international patents granted to Tunisia (Figure 20). A recent World Bank Investment Climate Assessment (ICA) enterprise surveys in the MENA region[31] found that innovation is consistently linked to bigger firms, to firms that have an international quality certification, that offer workers formal training, that use email or a website, and that are exposed to local and international competition. In the Tunisian survey, while one third of surveyed firms report having undertaken actions in a form of innovation, they are mainly conducted by big firms (44% of them) or partly exporting companies (41%). The same survey shows that only 16% of firms report engaging in important certification actions. Similarly, 57% of manufacturing companies that offered training to their workers report having innovated their production process (2009), against 32% for companies that did not provide training. The companies that provide training are often large and involved in exports. Fifty-three percent of surveyed firms have a website, but they are again dominated by big firms, while 93% of SMEs do not have a website.

Figure 19: Global Competitiveness Index 2011 Tunisia

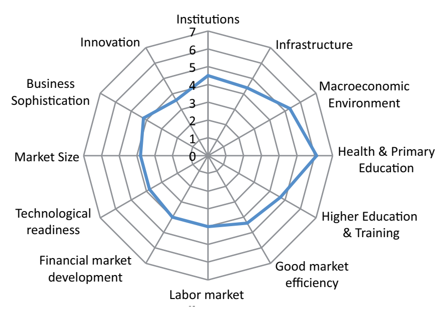
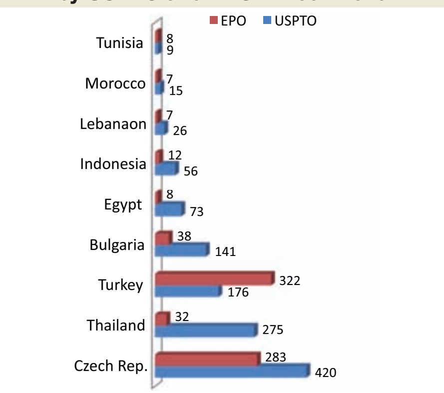


Figure 20: Number of Patents Granted by USPTO and EPO in 2001-2010



Source: USPTO and EPO.

30 Institut Tunisien de la Compétitivité et de l'Economie Quantitative (ITCEQ), (2010) "Rapport annuel sur la compétitivité 2010".

31 The ICA survey does not include Tunisia.

There is an open opportunity to create an innovation friendly business environment through greater freedom of entrepreneurship. Today, competitive firms are integrated into global chains of production and distribution networks. The catch-up potential of capital and technologic contents of production depend on the dynamic of the division of labor within the production chain, as shown by the East Asian experience. The technology spillover effects are not limited to geographical proximity, but are also linked to the proximity of technology levels between countries or to social proximity, such as companies' networks in terms of filial, partnership, or outsourcing. A survey conducted among international firms (Global Index Survey 2009) shows that most international investment activities consist of geographical expansion (66%), partnership and joint-ventures with foreign firms (60%), cross-border mergers and acquisitions (45%) and offshoring (39%). However, Tunisia does not have specific institutional and legal arrangements to promote such investments, except for the offshoring. It is also commonly recognized that entrepreneurial firms have stronger technology absorption capabilities, and joint venture is considered as an organizational structure favorable to innovation promotion. In the same way, the mobility of capital and labor is becoming a key factor in attracting innovation. Global competition for innovation makes skills, knowhow, and technology as mobile as capital. Therefore, attracting expertise and knowhow is becoming part of the competitiveness. The favorable position enjoyed by Eastern European countries for technological investment is partly due to the strong mobility of labor with Western Europe, while many East Asian countries have put in place specific and selective incentives for FDI, which promotes knowhow transfer. In Tunisia, while the authorities are making efforts to encourage R&D activities - by spending 1.25% of GDP (2009), running 30 research centers, 139 laboratories, and 638 research units, employing 16,000 researchers, increasing the number of technology centers (9 "technopôles") made available to firms - the effective impact on promoting innovation has remained limited. International experiences showed that if the overnment's support can facilitate the promotion of R&D activities, the industrial innovation can work when it is driven by the private sector.

3.2 Liberating the domestic private sector from the dual economy

While the offshore regime attracted FDI and developed a competitive manufacturing industry, it was unable to have spillover effects on the domestic economy. Since the introduction of the first offshore regime in 1972 (Law 72-38), Tunisia multiplied incentives for foreign investors and firms to develop its industry. The offshore regime provides generous benefits that attract investors: duty-free imports of raw materials and equipment, free repatriation of profits, and 10 years' of tax holidays.

Export-oriented industrialization policy successfully developed the country's textile industry, helped by the multifiber agreement and the advantages accorded by the EU on the European market. As a result, the textile industry is largely dominated by the offshore sector (exporting companies), with 84% of textile and apparel companies in the offshore sector, which represent 63% of manufacturing offshore companies (Table 6). Similarly, 63% of electric and electronics-related companies are in the offshore sector, against an average of 47% for the whole manufacturing sector. Nevertheless, there is a very limited link between the offshore and onshore sectors. Foreign participation in manufacturing companies is mainly limited to the offshore sector: 85% of companies with foreign participation are in the offshore sector, and 61% of them have 100% foreign capital. This is particularly true for the electric and electronics sector (88% in offshore), which nevertheless shows a relatively high share of foreign participation even in the onshore sector (23%) compared to the textile industry, which has only 9% of companies with foreign participation in the onshore sector, similar to the average of onshore manufacturing companies (Table 6). The onshore electric and electronics sector can therefore be considered as the most integrated manufacturing sector to the global market. The limited level of foreign partnerships in the onshore sector, and more broadly in Tunisian manufacturing industries, is due to the low integration level of onshore industry to the global economy. The existing dichotomy between the offshore and onshore sectors limits the technology spillover effects of the competitive export-oriented sector to the rest of economy.

Table 6 – Foreign participation among Tunisian firms

	TE*	Share of firms with foreign participation among TE	NTE**	Share of firms with foreign participation among NTE	Total	Share of firms with foreign participation
Textile and clothes	1752	53.3%	343	9.3%	2095	46.1%
Electric & electronic	219	87.7%	128	23.4%	347	64.0%
Total manufacturing industries	2740	60.3%	3016	9.6%	5756	33.7%

**TE: Totally exporting companies*
***NTE: Non-totally exporting companies*

Source: API data, November 2009.

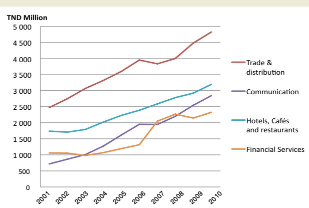
Beyond the fiscal measures, opening the onshore economy will help develop the domestic private sector. Manufacturing sectors exposed to global competition have higher labor productivity (73% of the EUs) than in the sectors with limited exposure (33% of the EU's). In order to break down the barriers to developing the onshore sector, the Tunisian government is progressively trying to harmonize the two schemes: the 2007 budget law reduced the onshore corporate tax from 35% to 30%, while a 10% corporate tax rate will be applied to offshore companies starting in 2012. Since 2009, a temporary measure has allowed offshore companies to sell on the domestic market up to 50% of the sales of their exports (against 30%, as provided by the Article 16 of the Investment Incentive Code 1993 (Law 93-120)). Nevertheless, governance problems and protectionism in the onshore sector limited the effectiveness of this measure. Thus, improving the business environment of the onshore sector through better governance and relaxing some unjustified protectionisms will contribute to a better market efficiency and boost the local private sector.

Similarly, the Tunisian service sector has high growth and job creation potential, but its exports are largely dominated by low performing tourism sector. The Tunisian service sector accounts for 45.5% of GDP and absorbs 49% of employment (2010). It is composed of transport and communication (30.2% of service sector in value added), distribution (18%), tourism (12%), financial services (9.7%), and other activities (30.1%). The Tunisian service sector's growth is below the MIC average. Between 2005 and 2009, it grew at 6% annually, against 6.8% for MICs and 10.6% in East Asia (developing countries) (Figure 21). During this period, annual growth of the nominal value of Tunisian exports was 9%, against 13% in MICs and 14% in East Asia. Despite the potential illustrated by the high growth in some sectors such as the IT and communication, Tunisian service exports are still largely dominated by the tourism and transport sectors, which accounted for 75% of service exports in 2010. However, the tourism sector is affected by its deteriorating performance and its specialization as a low-cost destination. Since 2008, the number of tourists in Morocco exceeded those in Tunisia. This gap has continued to grow despite the European recession and crisis, which strongly affected and will continue to affect these markets. In fact, Tunisia is the destination where the spending per tourist is the lowest among comparative MICs (Figure 22). With a well educated population, Tunisia has the potential to develop a higher standard tourism service by better orienting investments and policy. More specifically, focusing more on customized services, such as individual and business tourism, and exploring some niches could increase the value added. The country has, for example, a strong comparative advantage in developing health and well-being oriented tourism. On the African continent, Tunisia ranks 2nd after South Africa in health tourism, and is the second world destination for thalassotherapy after France. Diversification of the markets, such as domestic and regional ones, could also counterbalance the dependency to the Euroepan market.

Tunisian service sector development is hampered by heavy regulation and by the domestic market oriented policy. The protectionism confines the sector into the country's relatively small space considering its development potential. Tunisia is under negotiation with the EU for service trade liberalization.

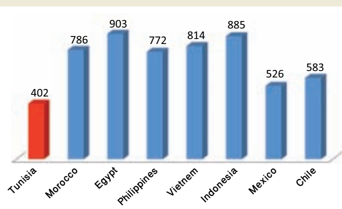
A preliminary analysis of INS data[32] on service products and activities shows that the services that will have the biggest spillover effects on other sectors are air passenger transport, professional services (engineering, consulting, accounting, audit, fiscal, and legal services), financial services, IT, handling and storage, tourism, and health services. A World Bank study on global integration[33] also identified some of these sectors as having an important comparative advantage: telecommunication, air transport, financial services, and professional services (engineering, accounting, auditing, and legal services). Some of these services are partly exported, but they are mostly oriented to the domestic market and are under strong regulation and restrictions for exporting and importing, thus limiting the entries of foreigners into these sectors. Another World Bank study[34] benchmarked Tunisian services sector restrictions based on restrictiveness indexes from OECD studies of product market regulation. The study concluded that among considered sectors (postal services, telecommunications, air passenger transport, the accounting, legal, and engineering professions, and banking), all the sectors except engineering score poorly in terms of openness. These poor scores can be explained mostly by the barriers at entry in favor of the nationals (in professions and banking sectors) and by market regulation to protect one or a limited number of actors (e.g., postal services, telecommunications, and air passenger transport). Similar barriers at entry against foreigners regulate the distribution sector. In addition, the currency control restriction in place renders the liberalization of financial services inapplicable. In addition to low performance in exports, these restrictions had created a rent-economy in the service sector, which penalizes the country's competitiveness through higher costs for the economy. Greater liberalization of the service sector could increase productivity of the service providers and reduce the cost to users. It will also boost the private sector development through exposure to the global market, and thus create more jobs, as the service sector is usually associated to high job creation elasticity especially for skilled workers.

Figure 21: Value added in Service Sector



Source: *Tunisian Authorities.*

Figure 22: Tourism Receipt per tourist (in USD, 2009)



Source: Calculation from UNWTO data.

[32] Gilles Nancy, report prepared in the context of joint work between the AfDB, the World Bank and the EU, 2010.
[33] World Bank (2009), "Tunisia's Global integration - A second generation of reforms to boost growth and employment".
[34] P. Dee, N. Diop (2010), "The Economy-wide Effects of Further Trade Reforms in Tunisia's Services Sectors", World Bank research paper.

3.3 Policy recommendations

Short - medium term policy recommendations:

- **Promote regional integration to diversify trade partners:** The recent rapid growth in developing country exports of manufacturing industries was triggered primarily by the very rapid growth of South-South trade[35]. East Asia has, by far, the most complex export structure among developing regions, contributing to the high-technology boom in South-South trade. Since the Tunisian revolution, the political bottleneck for regional integration has become less of an obstacle. There is an open opportunity to develop regional trade, especially among Maghreb countries, which are Tunisia's natural trade partners. As shown by the importance of neighboring countries' demand in visiting Tunisia[36], there is also a high potential for Tunisian exports to expand to these markets. Harmonizing business and trade standards, breaking down non-tariff barriers, and liberalizing capital and selected labor flow between these countries could concretize this potential. Furthermore, pursuing and concluding trade negotiations with African regional entities, establishing clearer and favorable laws and regulations for trade relationships, and setting-up a mechanism to access market information would facilitate Tunisian trade development with these countries.

- **Freedom of information and ideas** is critical to promoting R&D and innovation. Changing the culture and behavior shaped during the decades will not be easy, including for the private sector. The government's role will therefore be to proactively diffuse public information and data in a way that can serve R&D. The shift from a centrally focused administration culture to user (private sector) oriented service could be facilitated by the adoption of a strategic approach for information and data diffusion to the private sector.

Long term & structural policy recommendations:

- **Foster entrepreneurship culture:** The OECD identified the following measures as favorable to innovation[37]: facilitate new and young enterprises, which often have innovative behavior;

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[35] UNIDO (2009), "Industrial development report".
[36] In recent years, the significant and increasing contribution of Algerian and Libyan visitors to Tunisian economy was witnessed, which compensated for the decrease in tourism receipts from European countries. Although fewer in number, they spend more time in Tunisia and they are more integrated into Tunisian local economy.
[37] OECD (2010), "Ministerial Report on the OECD Innovation Strategy".

reduce entry and exit barriers (such as for start-ups); create a flexible factor allocation policy; develop an attractive fiscal system; and support existing SMEs. Greater institutional flexibility to foster an entrepreneurship culture through these measures will create an innovation friendly environment. In addition, providing incentives and specific schemes for the development of entrepreneurial firms, joint venture, and large types of cross-border flexible partnership possibilities would make Tunisia more attractive for entrepreneurs and innovation oriented FDI.

- **Prioritize incentive for innovation related activities:** In fast growing East Asian MICs, the fiscal incentives are becoming increasingly selective. In Thailand, incentives have been granted for the development of STI (skill, technology, and innovation), while Malaysia granted incentives to the upgrading of industries already in place. Singapore created an institutional framework facilitating joint ventures and patent granting (such as in pharmaceutics), which attracted international researchers. Tunisia's fiscal incentive system was oriented to exports and employment, while the focus on the number of jobs created tends to favor labor intensive industries. It is largely acknowledged that given the increasing unemployment rate, job creation will be the most critical objective in the short term. However, over the medium term, a differentiated approach for incentive schemes should be introduced in order to attract innovation and technology related FDI. This approach should distinguish between labor intensive industries on the one hand and for innovation and the higher stages of industry on the other hand,.

- **Promote private sector led R&D activities:** An increasing number of research and innovation support activities and mechanisms managed by several administrations without coordination created overlapping mandates and measures. The R&D expenditures are dispatched into a high number of themes and structures, and there is no clear linkage between expenditure and strategic objective, or between cost and performance[38]. Therefore, aligning the R&D policy with the objective of industrial innovation, coordinating ministries and structures, rationalizing research and innovation support mechanisms, assessing cost performance, and promoting results-based management will make government expenditures and supports more efficient. Similarly, complex bureaucratic procedures were constraining public-private collaboration in R&D activities. Simplifying procedures and promoting private sector oriented research activities will foster more adequate R&D for the economy's needs.

[38] "Policy development review: towards innovation-driven growth", World Bank, 2010.

- **Exposure to global competition of the onshore economy:** A competitive and open environment favorable to entrepreneurship facilitates innovation and R&D attractiveness in high technology. R&D investments in the US are more intensive in high technology (69%) than in Europe (35%), where half of R&D investment goes to middle technology. While Tunisia's offshore sector is a relatively open and competitive environment, its domestic private sector faces limited global competition and enjoys little from the externality of offshore competitiveness. Greater mobility between the two sectors, through relaxing rules on acquisition and holding of capital by foreigners, on labor mobility, and on control of capital account would facilitate the integration of the Tunisian onshore economy into international firms' networks.

- **Liberalize selected service sectors:** Gradual liberalization of the service sectors that have international comparative advantages and technology spillover effects could boost service exports and competitiveness, and attract investments and technology. As shown by the experience of the IT sector, there is a strong synergy between accepting FDI in sector (Mode 3) and service exports without traveling (Mode 1). Development of these services exports will generate important effects on growth and employment. Similarly, liberalization of the transport and logistics sector, including through conclusion of the open sky negotiation with the EU and through greater participation of foreign operators in logistics services in international ports (Radès) and airports, could contribute to the development of these services and increase the attractiveness and competitiveness of Tunisian sites by reducing transaction costs. Moreover, opening the distribution sector to foreign investments will first decrease the price and thus have an important social effect, and second, stimulate the domestic economy and give greater opportunities to the local private sector through more direct exposure to the global market.

- **Promote higher value added tourism:** In the short term, Tunisia needs to reassure potential tourists that the country is politically stable. The conclusion of the open-sky agreement with the EU could also boost the tourism market in Tunisia. Medium term efforts could be oriented to improving the quality of tourism services by providing customized service and by exploring niches, such as health and well-being or business tourism. Many of the developed countries' clients look for individual tourism rather than the mass tourism, while Tunisia remained specialized to the mass tourism. Moreover, individual tourism tends to benefit more directly to the local economy than the mass tourism which usually provides full package. On the other hand, despite recent increase of Maghreb visitors and of Tunisians travelling in their own country, the Tunisian tourism remained mainly oriented to the European market. As demonstrated by the compensation of the tourism receipts by Maghreb visitors in recent years, and in 2011 by wealthy Libyan “refugees”, diversifying markets could mitigate the risk of the dependency to the European market.

Conclusion

After the election of October 2011, there is a high expectation on the part of the population to see changes in their living conditions. The government faces a challenging task of not only managing the transition – eg. the democratic process with the preparation of the new Constitution and the transition government - but also of responding to the high expectations of the population, under difficult economic conditions due to the European crisis and the impacts of political and social tensions. It will be important to manage the expectations of those who fought for the revolution, and who are also eager to see their living conditions improve quickly. As analyzed in this paper, some of the issues will require urgent short-term solutions, while others will need a longer term approach or a structural shift.

Many of the governance related issues will need to be addressed quickly, as it will signal changes to the population and allow the new government to set-up a new culture especially in the administration and in the business community. At the same time, democratization will increase the accountability of the government and the administration. This could imply a reconsideration of the role of the state in the economy, as well as the establishment of clear and transparent rules for the business environment with a greater responsibility of the judicial system and other counterbalancing powers. As for the social issues, there is a strong and urgent need to tackle social resentment, by providing accountable and better focused social services, and by increasing the local government's role. Over the long term, a strategy for inclusive growth is required, with public investment and services designed to counterbalance the effects of the economic concentration in some regions, combined with a decentralization policy. While creating jobs through public investments is necessary as a means to addressing increasing unemployment, greater efficiency of the labor market and a better-oriented education system will contribute to reduce unemployment, especially for the youth. Nevertheless, Tunisian youth unemployment comes mainly from the mismatch between the labor supply and the economic structure, and thus cannot be solved without addressing the structural issue of moving up the value chain and breaking down the dual economy by better integrating the onshore sector to the global economy.

The revolution and the democratization process represent a unique opportunity to free the country from the bottlenecks that impeded its development. More than ever, the civil society that initiated this political change will have the responsibility to take part in the country's development agenda. The private sector, which was often hindered by the public sector's governance problems, will also be a key actor in improving the country's competitiveness and growth. While local governments served as a channel in the former centralized government, they will now have to serve the local population to influence the government's policy. Revolutions, by definition, involve an upheaval of roles, with new tasks and objectives for each stakeholder. Learning from past lessons and undertaking an objective assessment of past policies is also critical for moving forward, both for the country and for the international development community. The transition may still remain fragile, and the role of the international community, and particularly of the African Development Bank, will be to help make the Tunisian transition successful through assistance to find and build a new development path for the country and for other Arab and developing countries.

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